

**MINUTES
of the
FIFTH MEETING
of the
SCIENCE, TECHNOLOGY AND TELECOMMUNICATIONS COMMITTEE**

**November 18-19, 2013
Room 322, State Capitol**

The fifth meeting of the Science, Technology and Telecommunications Committee (STTC) was called to order by Representative Carl Trujillo, chair, on Monday, November 18, 2013, in Room 322 of the State Capitol.

Present

Rep. Carl Trujillo, Chair
Sen. Michael Padilla, Vice Chair
Sen. William F. Burt (11/18)
Rep. Kelly K. Fajardo
Rep. Roberto "Bobby" J. Gonzales
Rep. Jason C. Harper
Sen. Linda M. Lopez (11/18)
Rep. Debbie A. Rodella
Rep. James E. Smith (11/18)
Rep. Luciano "Lucky" Varela (11/18)
Rep. Monica Youngblood

Advisory Members

Sen. Carlos R. Cisneros (11/18)
Rep. Stephanie Garcia Richard (11/19)
Sen. Richard C. Martinez
Rep. Bill McCamley
Rep. Jane E. Powdrell-Culbert
Rep. Don L. Tripp (11/18)

Guest Legislator

Rep. Thomas A. Anderson

Absent

Sen. Bill B. O'Neill
Sen. John C. Ryan

Sen. Ron Griggs
Sen. Timothy M. Keller
Sen. Steven P. Neville
Sen. William H. Payne
Rep. Nick L. Salazar
Sen. Peter Wirth

(Attendance dates are noted for members not present for the entire meeting.)

Staff

Gordon Meeks, Legislative Council Service (LCS)
Ralph Vincent, LCS
Renée Gregorio, LCS

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written testimony are in the meeting file.

Monday, November 18**Call to Order and Introductions**

Representative Trujillo called the meeting to order, and committee members introduced themselves to the audience.

Telecommunications Reform

Senator Phil A. Griego, who has been asked to carry the legislation, spoke in support of the telecommunications bill before the committee, saying that it is a good free-market bill that does a lot for consumers in urban and rural areas.

A panel presented pros and cons on this legislation. Leo Baca, lobbyist with CenturyLink, said the bill is designed to create retail parity. He said that the bill amends existing law that applies to rural telecommunications and has that law apply to all companies without affecting the rural companies. He pointed out that the Rural Telecommunications Act of New Mexico has been in effect successfully since 1999. This amendatory language would provide for less regulation for CenturyLink and Windstream, and Mr. Baca opined that the legislation would help drive economic development in the state. He said that the bill is not about wholesale or interconnection issues and does not make any changes to the State Rural Universal Service Fund (SRUSF). He stated that the legislation would extend benefits established for rural areas to the rest of the state. Mr. Baca detailed some language changes related to issues brought up at the STTC meeting in Las Cruces; in particular, he brought forth an amendment to the bill as drafted that would further appease and protect rural telecommunications companies by ensuring that their regulatory burden is not increased. In response to a question about amending Chapter 63, Article 9A NMSA 1978, the New Mexico Telecommunications Act, rather than the Rural Telecommunications Act of New Mexico, Mr. Baca indicated that this had been tried in prior sessions without success. Also, Sandra Scoggin, general counsel, Public Regulation Commission (PRC), had spoken at the Las Cruces meeting; the main caveat was that the PRC has not formally taken up this bill for review.

Sam Ray of the New Mexico Exchange Carrier Group (NMECG) and a registered lobbyist, and Charlie Ferrell, executive director of the NMECG, gave an overview of the NMECG, an industry association made up of small rural telecommunications companies. Mr. Ferrell explained how the Rural Telecommunications Act of New Mexico, as passed in 1999, established a framework for the PRC to regulate smaller companies. He emphasized the importance of what the legislation then recognized, which was the need for disparate regulatory treatment between small rural companies and larger companies because of their size and the

remote, and therefore high-cost service, they need to provide. He added that the Federal Communications Commission (FCC) also recognizes the need for such disparate treatment, which exempts rural companies from certain obligations. He said that the NMECG companies have been able to provide excellent quality service at affordable rates because of reduced regulations. He cited one of the main reasons for disparate treatment being that the smaller companies often do not have staff attorneys or regulatory analysts, and the more regulation there is, the more these companies would have to turn to outside experts at a large cost. He added that other states, such as Nebraska, Minnesota and Montana, also recognize the need for differing treatment.

D Jerry Fuentes, lobbyist for AT&T, stated that the company has no position on this bill. He spoke of trends in the wireless industry, the shift to internet platform (IP) networks for connectivity and how wireless use is becoming more prominent. He said that AT&T has invested \$98 billion across the U.S. since 2008 and \$175 million in New Mexico in wireless infrastructure. He stressed the importance and the benefits of moving toward IP networks to ensure consumer protection, innovation in new technologies, job growth, meeting consumer demand and achieving widespread broadband service.

R Carol Clifford, an attorney and lobbyist for tw telecom, inc., spoke about the three impacts she sees this legislation having on the regulatory services in the state. It would: (1) eliminate oversight of business services for CenturyLink; (2) expand CenturyLink's access to the SRUSF; and (3) repeal CenturyLink's carrier-of-last-resort responsibilities. This legislation would eliminate the requirement that CenturyLink prove effective competition, which is of great concern to tw telecom, she indicated. She also said that CenturyLink would have the incentive to lower service quality and raise prices under the changes proposed. She added that by placing CenturyLink under the same regulatory treatment as rural carriers, it would be able to gain greater access to the SRUSF and that rural carriers have special access for good reason because of the difficulty in providing service to rural communities.

Committee members brought up several questions, and the ensuing discussion included the following:

- concern over the risk to customers in rural areas;
- CenturyLink has taken exception to the 70% business market share calculation, which it says is a policy question;
- CenturyLink stated that it does not want to reduce services and raise rates;
- CenturyLink operates in 37 states; some of those states provide regulation through rules, some through legislation;
- tw telecom builds fiber networks in Rio Rancho and Albuquerque, has invested \$114 million in its network and opposes the legislation as drafted;
- the most recent statute dealing with effective competition was in 1985, and it does not take wireless services into account;

- the PRC stands by its effective competition determination, and the PRC found that CenturyLink met its burden of proof for packaged and bundled services, but it failed to meet the burden of proof for business services;
- there were several questions on the effect of this legislation on rural consumers and on CenturyLink's access to the SRUSF;
- this legislation would give CenturyLink immediate regulatory relaxation;
- residential rates in rural areas could be affected with changes to the SRUSF and the loss of disparate language for smaller carriers;
- CenturyLink stated that, of course, it would not provide services at no cost, that it could not guarantee that rates would not be increased and that it has a DSL product at present that is not regulated by the PRC but costs the same for urban and rural residents;
- regarding regulation around the quality of service provided, the NMECG reported that today's regulations allow for lower cost and take less time; tw telecom reported that it is also subject to the same 10-day filing and has to answer to the PRC on consumer complaints; CenturyLink has specific service quality requirements with fees imposed if it messes up;
- the NMECG stated that losing disparate treatment could limit its ability to borrow, and if regulations change and require more from small companies, they could not afford it;
- tw telecom will expand its network and build more fiber connections to its customers;
- CenturyLink would have more incentive to invest in expansion if this legislation passes;
- through this legislation, CenturyLink would not have service quality requirements; would gain flexibility in its business rates; and would be better able to compete with tw telecom; and
- there is a need to be cautious about protecting rates and consumers and entities serving rural areas.

No motions were made by the STTC on this piece of legislation.

Renewable Energy Storage Task Force

After introducing all the people associated with the Renewable Energy Storage Task Force (RESTF), Jeremy Lewis, state energy program manager, Energy, Minerals and Natural Resources Department (EMNRD), reviewed specifics around the RESTF formed by the EMNRD as a result of direction in House Joint Memorial 10 and Senate Joint Memorial 43 of the 2013 legislative session. As per those memorials, the RESTF developed a report for the STTC that gives an inventory of existing federal and state renewable energy storage policies and regulations and that suggests legislative and regulatory options. With its diverse membership and strong participation from electric utilities, the group had four meetings, two each in Santa Fe and Albuquerque. Mr. Lewis highlighted other states' initiatives, identified New Mexico's market for energy storage and spoke of the options arrived at by the collaborative efforts of the RESTF. Among these options are:

- creating an energy storage advisory council;
- coordinating with other western states in identifying regional energy storage possibilities;
- continuing research and development in partnership with New Mexico's national laboratories, universities and utilities;
- devising a large-scale energy storage demonstration project;
- examining time-of-use rate expansion;
- looking at modifications to New Mexico's production tax credit; and
- investigating funding sources or cost-recovery options for renewable energy storage projects.

Mr. Lewis said that the energy storage landscape is changing rapidly and that there is strong support for continuing to explore these energy storage issues. (See the RESTF report in the handouts for details of the RESTF's evaluation of energy storage.)

Committee members brought up several questions, and the ensuing discussion included the following:

- the New Mexico Renewable Energy Transmission Authority (NMRETA) is part of the RESTF because energy storage is part of its mission and it provides a good resource in helping to expand renewable transmission;
- rather than expanding the NMRETA's role, which would require more funding, a recommendation was made to look at ways to fund large-scale transmission projects;
- the RESTF's efforts were largely focused on reviewing existing technologies; and
- the EMNRD has the staffing and expertise to continue the work of the RESTF, and New Mexico brings the strength of having two national laboratories in its midst to move forward with renewable energy options.

NMRETA Status Report

Jeremy Turner, executive director, NMRETA, outlined the NMRETA's mission, which involves planning, financing, developing and acquiring high-voltage transmission lines and storage projects. The NMRETA has the ability to issue debt, and its projects need to include 30% of their power from renewable sources. Mr. Turner reviewed the state's electricity generation by source and the electrical grid pattern in the U.S. He said that most of power is headed west, to California, which is also the best market because of price and demand, and New Mexico can take advantage of opportunities to sell to California because of its location. Mr. Turner stated that one-third of the electric power generated in New Mexico is exported out of state.

Mr. Turner said that there is less market volatility in renewable energy production and that planned coal retirements equal over 7,200 megawatts — 5,000 megawatts from nine western states plus 2,220 megawatts from one California plant. Mr. Turner indicated that New Mexico needs a power distribution system, and if it can set up the right transmission system, New Mexico can be a major exporter of energy resources.

Projects that the NMRETA has supported include High Lonesome Mesa (a Torrance County wind farm); Blue Mesa Energy, LLC (an eastern New Mexico wind farm); Lucky Corridor, LLC (a line between Taos and Farley); Centennial West Clean Line (a line from New Mexico to California); and Western Spirit Clean Line (in central New Mexico). (See handout for details of these projects.) Mr. Turner stated that the NMRETA has no statutory ability to make others work with it to coordinate the transmission of energy.

Committee members brought up several questions, and the ensuing discussion included the following:

- two of the four Public Service Company of New Mexico coal plants in the Four Corners area will close down;
- the first phase of the Tres Amigas project is completed, and the project is on track;
- the NMRETA is limited in its resources and does not work with all communities on their development projects;
- communities seeking assistance should be directed to the utility companies first, then the New Mexico Finance Authority and the NMRETA;
- in terms of funding requests, in the last legislative session, the NMRETA asked for \$395,000 and received \$250,000; this session, it is requesting \$500,000, and if the NMRETA can get \$375,000 that is recurring, it would consider itself successful;
- companies coming to New Mexico are not required to work with NMRETA; for example, Tres Amigas has been before the NMRETA board, but it works independently, and the NMRETA would also like to work with SunZia and others; and
- the NMRETA should be a coordinated, one-stop shop and clearinghouse for the process of building transmission and storage facilities.

State Investment Council (SIC) Technology Investments in New Mexico

Steven K. Moise, state investment officer, began by saying that the permanent funds are experiencing new highs. The Land Grant Permanent Funds (LGPF), for example, are valued at \$13 billion, and the Severance Tax Permanent Fund (STPF) is at \$4.4 billion. As of September 30, the SIC assets under management totaled \$17.8 billion. Mr. Moise highlighted changes needed to the SIC statutes to bring it into alignment with other institutional investors in the state and in the U.S. Among these are to increase the standard of care requirement for the LGPF, remove the 15% cap on international stocks and bring the SIC rules into alignment with the rules for the Public Employees Retirement Association and the Educational Retirement Board and other investors. He also reviewed ways to increase the inflows into the STPF.

Brian Birk, managing partner at Sun Mountain Capital, who advises the SIC, said that financial returns have improved since 2004, when the New Mexico Private Equity Investment Program (NMPEIP) started to be managed with financial returns as the primary focus. The NMPEIP does not directly invest in companies but, rather, into venture capital funds that are then invested into companies. Mr. Birk stated that there is capital available to make new commitments, and the NMPEIP funds and portfolio companies are making good progress. He

stressed the dramatic change in the NMPEIP's performance, which is now in alignment with national benchmarks, earning a return comparable internationally for venture capital funds. He highlighted the NMPEIP's impact on the state in the creation of jobs and investment in New Mexico-based companies.

Mr. Birk gave a brief overview of some of the portfolio companies, such as Exagen Diagnostics, Inc., which does diagnostic testing for lupus and other related diseases, for which up to \$35 million has been invested, including \$30 million from outside of New Mexico. Sun Mountain Capital was attracted to this company because of its performance. ZTEC Instruments was acquired by LitePoint at a significant financial gain from the NMPEIP, and LitePoint plans on expanding its New Mexico work force.

Mr. Birk mentioned the broad scope and investment amounts of the NMPEIP's companies by sector. In summarizing the impact of the NMPEIP, Mr. Birk said that the portfolio is diversified, and for every \$1.00 invested into venture capital, \$6.40 is earned. He added that in terms of the economic impact on New Mexico, different companies were reviewed on a quarterly basis, and there is nearly a \$50 million per-quarter impact to the state, which represents a substantial impact to the general fund. At present, there are 1,367 full-time jobs with an average yearly salary of \$67,000 in the state.

In summary, Mr. Birk stated that new commitments and funds are being evaluated, financial returns are improving steadily and the NMPEIP is continuing to have a positive impact on New Mexico's economy.

Committee members brought up several questions, and the ensuing discussion included the following:

- as long as people charged with making investments are fiduciaries, then there is qualified care and no need for a cap on investments;
- different programs exist for entrepreneurs to get bridge funding; there is a need to find seed investors, and the state has active networks for this;
- the SIC does not look at individual investments, but it hires professional fund managers to accomplish this on its behalf;
- the improvement that is being seen with SIC's investments is due to many factors, including changes in strategy and management, moves in the market and broad diversification of assets;
- legislation is being looked at that relates to the model presented to the STTC at New Mexico State University that would provide early help to investors and equity in the investment for the state;
- the SIC and Sun Mountain Capital agree that with the right governance and quality assurance, equity investments can be made successfully;
- New Mexico lost an opportunity for a large-scale economic development project with Apple that was one of the largest ever offered in the country, and there is a need to put together an incentives package so that New Mexico can be on a level playing field

- with its peer states, where flexibility and the ability to move quickly provide a competitive advantage that New Mexico needs; having a closing fund or a pool of capital or incentives to match the needs of these companies is necessary; and
- there need to be "clawbacks" in place in any package that deals with the minimum number of years a company commits to staying in the state once a deal is struck.

New Mexico Broadband Overview

Gar Clarke, broadband program manager, Department of Information Technology (DOIT), stated that New Mexico used to be one of the bottom-performing states and now has one of the top-five performing broadband programs in the nation. He gave an overview of federal funding received, which amounts to \$6 million with the state match added to it, and it is used for mapping, planning, capacity building and technical assistance.

Mr. Clarke said that DOIT staff go out twice a year to harvest data from providers, which include enhanced 911 data and doing speed tests of service. As part of the capacity-building framework, he mentioned that there is a strong executive committee as well as a broadband working group (BBWG) made up of 30 individuals representing different business sectors throughout the state. The BBWG ensures that the state's interest and the public interest are represented. Mr. Clarke said that a fabric is also being developed to keep state agencies informed, although this needs to become a more formal process of engagement.

Among the technical assistance projects that Mr. Clarke spoke of are videos for educational purposes, public internet training and access, a database with all institutions in the state where internet access is available and a train-the-trainer program that is nationally known and includes broadband pilot projects at pueblos and in the Navajo Nation.

Mr. Clarke indicated that a statewide strategic plan will be completed in the latter part of 2014. He added that New Mexico needs to get organized so that it does not continue to lose out on funding opportunities. He reviewed the composition of the BBWG, which includes experts from different sectors of government, the telecom industry, federal loan programs, tribal entities, governmental and community organizations and technology councils. He also spoke of the development of a broadband map gallery, which is done by regions and might be expanded to include legislative districts. (The New Mexico broadband map can be found online at <http://nmbbmapping.org/mapping>.) Another tool for planning is a community anchor site assessment, or CASA, which serves providers and includes public and private facilities that require broadband services. In terms of a regional adoption component, two regions have been selected for pilot projects: the Northeast Economic Development Organization and the Southwest New Mexico Council of Governments. Mr. Clarke indicated that the regional pilots will help to develop a solid process of bringing broadband to communities.

The draft recommendations that the BBWG derived that are currently being vetted by the executive committee and state agencies fall into the following major categories: cross-cutting (pursuing a state purchasing cooperative, smart funding, matching funding, a centralized network

and tribal support); education (a statewide educational network, technical support for smaller school districts, professional development and online learning); health care (coordination of telehealth, an infrastructure fund, fair reimbursement rates, professional development and infrastructure); and economic (education and outreach, strategic planning and partnerships). He added that most funding sources require an 80/20 cash match and funds are needed to get these projects going. Other needs include developing collaboratives to purchase equipment and services together, looking at different mechanisms to fund projects, having a centralized network and expanding public-private possibilities.

D Committee members brought up several questions, and the ensuing discussion included the following:

- there is ongoing work to get all libraries in the state on board with broadband, including state networks;
- 18 school districts are participating in establishing their own recurring fund for technology, and Taos schools generated \$500,000 annually;
- there is a lot of communication between the Public Education Department and the DOIT regarding broadband requirements and Partnership for Assessment of Readiness of College and Careers assessments for schools; and
- the state needs a funding mechanism for its broadband network needs, and there has to be clarity and coordination between what private companies are providing and what the state is developing.

Think New Mexico Jobs Initiative

Fred Nathan, director, Think New Mexico, and Jason Espinoza of Think New Mexico gave the committee an overview of the job crisis legislation that Think New Mexico is bringing to the legislature. Mr. Nathan said that his organization works on one topic at a time. Last session, it was PRC reform, and this session seems to be the right time to work at strengthening and diversifying the private-sector economy, even if this is not politically achievable. Mr. Nathan reported the loss of 37,000 jobs in New Mexico, with 14% underemployment and unemployment in the state. He said that Think New Mexico staff members are not experts in this area, but they spoke to the experts, and an enormous amount of research has been conducted, notably by the Ewing Marion Kauffman Foundation in Kansas City, Missouri, which focused on entrepreneurship and economic development. The research shows that many states have underperformed, and legislatures and governors should focus on creating a positive climate for all businesses.

Mr. Nathan said that two-thirds of all businesses started since 1980 have been in the science, technology, engineering and mathematics (STEM) field. He added that immigrants tend to be disproportionately entrepreneurial, with 40% of Fortune 500 companies started by immigrants or children of immigrants. He said there was speculation about what would occur if these two populations — people interested in STEM fields and immigrants — were put together. One proposal Think New Mexico came up with because of the low enrollment of international students at state universities is to charge in-state tuition to international students who meet

admission requirements and are interested in the STEM fields. Mr. Nathan told a story of an international student from Taiwan who came to New Mexico and stayed, enrolling at the University of New Mexico (UNM) and starting a web design business. He then was approached by Sushi King in Albuquerque to work on some point-of-sale software, which he created (pre-iPad), and since that time, he has hired more than 60 people, many of them graduates from STEM fields at UNM. He ended by saying that the Kauffman Foundation urges states to be customer-friendly to attract new businesses.

Another idea Mr. Nathan discussed is a business portal or one-stop shop for new businesses. A third idea is to offer businesses a post-performance incentive, as Utah does. He stated that Think New Mexico is in the process of drafting legislation on all these ideas.

Committee members brought up several questions, and the ensuing discussion included the following:

- Utah has been able to attract businesses without a "carrot fund" up front by basing its incentives on performance rather than guesswork, and Utah developed a results-oriented tax incentive; and
- there is concern over not focusing on New Mexico's own students by providing a tuition break to international students.

The STTC recessed at 5:18 p.m.

Tuesday, November 19

Cable Industry Overview

Susan Bitter Smith, executive director, Southwest Cable Communications Association (which represents Arizona, New Mexico and Nevada), spoke of the services and relationships among the regional groups and operators in New Mexico that also provide service to other states. She said that the cable industry started out in the southwestern states as a mechanism of bringing broadcast signals to remote areas. What began as a re-transmission mechanism of broadcast signals in the 1950s later added programming when many channels became available. Packages were put together that were unique to local areas and evolved around communities of interest, she added. In New Mexico, cable television operators are regulated and franchised by local municipalities or counties and also regulated by the FCC. Standards are established that relate to customer service and technical operation, but not programming. She concluded by saying that cable is controlled locally, coupled with federal standards.

Ms. Smith said that in the 1980s, the cable industry was engaged in adding video channels, but at the present time, it is much more focused on broadband services. She said the mission of the cable industry is to continue to increase its penetration in rural areas with a wide range of services. She stated that cable operators pay franchise fees to local communities as well as sales tax and property taxes that benefit municipalities and counties across the state.

Among the challenges that Ms. Smith cited are establishing standards on privacy. She said that federal law precludes releasing customer lists to outside sources. There are also programming cost challenges that need to be balanced with customers' ability to pay.

Chris Dunkeson, general manager of Comcast New Mexico, said that the company is celebrating its fiftieth anniversary and has operated in New Mexico since 1999. Comcast brought broadband access to many locations that did not have it, he added, such as Silver City, Deming and Taos. The company is proud of its "internet essential" program, which offers \$9.95 internet access for families who qualify for the federal school lunch program, and 4,000 families have been connected through this program. He stated that the company is also focused on helping to drive economic development outside of Albuquerque.

Jane Shanley, general manager of Cable ONE, said that the company provides service to 54,000 homes in Rio Rancho and Roswell, with more than 21,000 customers. It offers cable, internet and telephone service in these areas. Ms. Shanley stated that the company has a strong focus on its broadband product. It also offers high speeds through infrastructure rebuilds and upgrades and is upgrading its plant to increase capacity and add more high-definition channels. The company also has a strong focus on the business community and added 100 businesses this year. Cable ONE employs 43 people at two offices in the state, is active in chambers of commerce, including the Hispano Chamber of Commerce, and provides service to schools and fire and police departments as a way of giving back to the communities it serves.

Committee members brought up several questions, and the ensuing discussion included the following:

- Comcast has brought its "internet essential" program to 250,000 homes nationally;
- although some costs could be alleviated, especially in rural areas, when putting fiber and cable into the ground by requiring that conduits be placed when roads are built, good communication is essential to ensure careful infrastructure development and makes sense for the area of deployment; and
- franchise documents for the cable industry and the local government are fairly complicated contracts that spell out fees, taxes, reporting, construction and audit requirements with many rules that work in concert with federal rules; each is different and reflects the needs of the local community.

Southeast New Mexico Nuclear Corridor

Former State Representative John Heaton gave his presentation on the nuclear industry in the southeastern part of the state. He mentioned that the active facilities include Waste Control Specialists, the URENCO plant and the Waste Isolation Pilot Plant (WIPP). Proposed facilities included International Isotopes, Inc.; the Eddy-Lea Energy Alliance (ELEA) interim storage site; and the generic thermal load studies-in-salt project. He added that the ELEA is made up of four governmental groups: the cities of Hobbs and Carlsbad, and Eddy and Lea counties. The ELEA bought 1,000 acres of land between Carlsbad and Hobbs and formed this joint venture. Mr. Heaton indicated that, two years ago, the ELEA decided that with a blue ribbon commission's

recommendation about interim storage, the ELEA site was ideal for several reasons, including an existing immense rail system, a pre-existing scientific community, a repository only 12 miles away, supportive communities for nuclear projects, its remote location and geologic stability. The expected capacity for interim storage is at 40,000 to 60,000 tons, he said.

Mr. Heaton reported that risk assessments indicate that the risks at this site would be very low. He reviewed what spent fuel storage casks look like, how their construction can differ and how they are shipped, adding that there are three lines of defense in terms of radiation protection. He also stated that a new area of research is related to fuel integrity.

In citing the importance of interim storage, Mr. Heaton said that the U.S. Treasury will pay out \$20 billion by 2020 because of lawsuits; then it will pay \$500 million per year until 2048, when the first repository would be open. An interim storage facility would stop all of those payments, he stated. In addition, the U.S. Department of Energy needs interim storage for its defense program. Mr. Heaton also reviewed the economic benefits in the form of jobs provided for all aspects of an interim storage operation.

Among the advantages of conducting a salt defense disposal initiative at WIPP, Mr. Heaton cited time and cost savings as primary. He said that a lot of mining has already been done for this site, and the expectation is that this project would take seven years to accomplish, with hopes of receiving \$7 million per year in financing for the next five years.

Because Xcel Energy is cutting off 500 megawatts of power from the cooperatives, small modular reactors (SMRs) are being looked at for power generation. Mr. Heaton said that four eastern New Mexico cooperatives are affected, as well as the western farmers group. Lea County has built a gas generator, he added, but the others will need 360 megawatts of power by 2022, when the final phase-out happens. SMRs are also being looked at to provide more power in the southwestern part of the state, where a tremendous growth demand in the oil-pumping business exists, he noted.

Mr. Heaton ended by saying that coal is diminishing as a power source and that there are 3,500 jobs in northwest New Mexico associated with coal plants and mining. He said that these jobs could be replaced by moving into other kinds of power generation, such as nuclear.

Committee members brought up several questions, and the ensuing discussion included the following:

- URENCO was the first nuclear power company to get a combined building and operations permit, which helps to expedite permitting and licensing processes;
- there is concern over whether anything is compromised in this combined building and operations permit, and there are assurances that the federal Nuclear Regulatory Commission (NRC) is tough and careful about licensing;
- of the 16 square miles of land at WIPP, only one-half mile is being occupied by waste, and one of the class 3 changes to the WIPP facility is to add two more panels;

- although there are no restrictions on the number of panels that can be incorporated at WIPP, any change in the original configuration of the repository involves obtaining a permit modification;
- the ELEA interim storage waste facility could hold between 40,000 and 60,000 tons of waste;
- the proposed interim storage site in Loving County in Texas could be viewed as competitive with the ELEA site, but the Utah site is a private site around which the state built a wilderness area to prevent shipments from going to the site;
- it is likely that the amount of legacy waste that could be shipped to WIPP would fill WIPP's total capacity, although transporting the waste at the Savannah River and Hanford sites would be extremely costly;
- more characterization of waste is required now than at the beginning of shipments to WIPP, when all the drums were ready to be shipped;
- WIPP has the capacity to handle all the transuranic (TRU) waste that exists in this country; the problem would come if more waste gets characterized as TRU than is currently known;
- WIPP takes defense waste; interim storage sites would take care of commercial nuclear waste;
- the defense nuclear waste must be cleaned up nationwide;
- the NRC application process for the ELEA interim storage site will take four years to complete, and then there would have to be a consent-based process and education across the state to avoid ending up like the controversial Yucca Mountain site;
- proactive moves the legislature could make in relationship to the nuclear industry include encouraging isotope manufacturing and power generation; adding nuclear power to the renewable portfolio standard, which was developed for clean energy; locating funding for a consent-based process and some financial help for interim storage or any other nuclear facility that might get developed; developing a commission and a technical subcommittee made up of national laboratory and university scientists and engineers to brainstorm together; and developing an implementation subcommittee for economic development;
- there is a need for interim storage across the country because of the cost of transporting nuclear waste;
- France generates 80% of its electricity through nuclear power and recycles spent fuel rods twice using the same system used by URENCO; France is also part owner of this centrifuge technology; and
- the STTC is interested in developing legislation next year so that development of the nuclear industry can continue.

Gateway Technology for Restoring Forests

Margo Covington, executive director, and Douglas Webb, both of Sustainable Communities/ZERI NM, Inc., along with Breece Robertson, Trust for Public Land, addressed the STTC on gateway technologies for forest restoration. These technologies help to restore watersheds, forests and economies and open up the use of many recently commercialized

bioenergy technologies. Ms. Covington spoke about her organization's vision, which includes transforming local communities to be less dependent on taxes, revitalizing watersheds and creating a bio-based energy-industry sector.

Ms. Covington spoke about the importance of having solid information on how much of the forests need to be cleared to restore them and how crucial it is to know the details of quantity, quality, sites, time frames, energy technology and business plans so that financial institutions or grantors have the information that allows them to loan or grant money. She said this is not the current conversation at all. She delineated several urgencies related to wildfires burning the watersheds, specifically the Las Conchas fire, which burned 40,000 acres in one day. The state treats about 12,000 acres per year, and last summer, three New Mexico rivers were flowing with ash and debris. She said that the average cost to the state of wildfires is \$360 million per year.

In addition, Ms. Covington stated that trees are growing faster because of warmer climates, with regrowth rates speeding up. More water is being used, less water is ending up downstream and more waste is created that needs to get cleared over time. She added that bioenergy technologies have become commercially proven, and there is an opportunity for New Mexico to create its own bioenergy industry. She gave as an example a 10 kilowatt to 20 kilowatt gasifier at Santa Fe Community College that uses wood chips and meets 85% of the college's peak heating demand.

Ms. Covington suggested turning around the high costs associated with fighting fires and thinning forests by creating jobs in a profitable business that would cost only \$1.8 million and would create 500 jobs in five years using the gateway tool. She said that this would amount to \$17.5 million per year in new jobs. She also said there are many strong partners on the team, and there is support from New Mexico's congressional delegation and from the Economic Development Department. Support is being sought from the Department of Environment and the EMNRD, as well as from the legislature, for this gateway technology assessment tool.

Committee members brought up several questions, and the ensuing discussion included the following:

- Representative Gonzales expressed interest in sponsoring the group's appropriation request because of the potential for economic development and a strong educational component;
- the U.S. Forest Service is on board with this technology, and the group has also reached out to the Sierra Club; and
- several environmental groups have worked together to identify 14 forest restoration principles, which will be posted on the organization's web site and sent to the STTC members.

Joint Meeting with the Legislative Finance Committee (LFC) on DOIT

Representative Varela called the joint meeting of the STTC and the LFC to order at 2:25 p.m to hear testimony from Secretary of Information Technology Darryl Ackley on the DOIT's

budget. Secretary Ackley defined the DOIT as the state's enterprise information technology service provider and said that the department also houses the state chief information officer. He reviewed the services that the DOIT provides to state government, including planning and oversight of information technology (IT) projects and purchases and providing internet, radio, email, web, mainframe and hosting services.

In highlighting the DOIT's accomplishments, Secretary Ackley said that the DOIT maintains critical operations all day, every day; ensures no interruptions of service, even during loss-of-power incidents; has improved public safety communications and radio broadband; has created more reliable radio communications and provided internet services to rural and remote areas; and provides greater service at a reduced cost. He added that the state has been actively involved in developing a public safety broadband network and that New Mexico is the first state to successfully negotiate a lease with the First Responder Network Authority (FirstNet). He stated that, next week, he is going to Washington, D.C., to give a presentation on New Mexico's project and that the state is gaining notoriety for its IT work. Other improvements have been made to customer service, bringing maturity and modernization to billing, accounts receivables and asset management. He said that the collaboration with municipalities and counties has increased and that there have been improvements to cybersecurity. He also mentioned that the state's web portal for providing near real-time fire information has been recognized by being a national award finalist. Secretary Ackley stated that New Mexico's Information Technology Commission (ITC) membership is nearly fully appointed, and a meeting of that commission is scheduled for December 16, at which time officers will be elected so that the ITC can begin to do business.

In citing the DOIT's goals, Secretary Ackley stated that the areas of improvement will continue to be around financial management, cost recovery and portfolio management. He said that this process is close to being automated through a telecom expense management suite, improved communications to agencies and streamlining of processes. Secretary Ackley mentioned the volume of fiberoptic cables being put in, with increased broadband capability in the state. He said that strategic broadband planning needs to be increased in importance to serve as a driver to education, health care, public safety and economic development. He also said that the DOIT is continuously looking for opportunities in rural areas to provide greater service at a reduced cost. In addition, he said, the modernization of public safety communications infrastructure, including radios and internet phone, continues. Also, the DOIT wants the State Human Resources Accounting Reporting Enterprise (SHARE) system to be sustainable and useful.

The DOIT charges back 99% of its budget, as dictated by federal regulations, he stated, as the DOIT needs to break even for services it provides as an agency. The DOIT's budget request is flat and totals \$63 million, the largest portion being for the Enterprise system. In other funds, the DOIT received \$1.9 million from the Department of Commerce for FirstNet planning. He said that the \$5 million SHARE appropriation is still unspent and the DOIT has a \$15.6 million

capital outlay request in its infrastructure capital improvement plan for radio modernization. The DOIT received \$1.5 million to do a comprehensive study, which is now completed.

Secretary Ackley ended with giving an update on the SHARE system, emphasizing that the way the state does business is completely reflected through the SHARE system because it is the financial system of records in which contracts, expenditures and payments are tracked. He reported that the DOIT has been working on upgrading the system, although in a briefing to the LFC at the end of the summer, the DOIT found that the upgrade was not going well. He said that the DOIT needs a "time out" to stabilize the system by stepping back, suspending the upgrade and working on replatforming the system without upgrades, but only with new hardware. Only \$500,000 of last year's funding request of \$5 million has been spent. He emphasized the importance of first making the system stable and integrated with hardware that is dependable. Secretary Ackley indicated that DOIT staff is working day and night, and the upgrades are currently on track. The DOIT still has the goal of completing this project by year's end.

Committee members brought up several questions, and the ensuing discussion included the following:

- the audit for the DOIT is on track, and audit modifications are completed;
- capital asset management continues to be a problem for the DOIT; it has implemented its asset model within the SHARE system;
- the DOIT still plans on using the \$5 million appropriation as originally allocated after upgrades to the SHARE system have been finalized and the system stabilized;
- the ITC still has three vacant positions, and no chair has been appointed, even though the commission was formed three years ago; it is not meeting its statutory requirements;
- the SHARE system represents two distinct systems: one for financials and one for personnel management; the upgrades to each were staggered, with each upgrade taking 18 months;
- there is much concern from both committees over nonresponsiveness to requests made to the DOIT for information, including a matrix of the SHARE system and a request for any open implementations and regular status reports and information on any newly funded projects;
- the DOIT has a matrix that tracks projects on intent, obligated amounts, certified amounts, assessments of status and risk;
- Senator Padilla gave the DOIT a proactive invitation to give a status report every month in the next interim;
- the issues at the Tewa Building are more facility-related than a data-center issue; and
- there was a request for the committees to be given a copy of the presentation that Secretary Ackley is giving in Washington, D.C.

LFC staff members presented detailed information and an evaluation of state agency IT requests. The requests represent 13 agencies, which submitted 22 requests for a total of \$46.8 million. In addition, general fund requests total \$26.1 million; other state fund requests total

\$16.5 million; and federal funding requests total \$4.2 million. (Details of these requests are in Attachment A of the handouts.)

Secretary Ackley indicated that state agencies present requests throughout the year that are reviewed by the DOIT, and then summaries are completed for each agency request, and the DOIT works with the Department of Finance and Administration while the LFC compiles its recommendation. The final request then gets voted on during the legislative session. Representative Varela suggested that the LFC recommendation be put together by the end of December rather than during the session; he also said that he would like to put the DOIT's budget on hold as he is not comfortable appropriating additional money to the SHARE system at this time.

Adjournment

There being no further business, the joint meeting of the STTC and the LFC adjourned at 4:00 p.m.